

309.7 - Fracture Toughness of Ceramics

SRM 2100 Fracture Toughness of Ceramic is intended for verification of fracture toughness testing procedures and may be used in conjunction with [ASTM](#) Standard Test Method ASTM C1421-99 "Standard Test Methods for Fracture Toughness of Advanced Ceramics."

A unit of SRM 2100 consists of five hot-pressed silicon nitride flexure specimens. Each specimen is 3 mm x 4 mm x (45 to 47) mm. The SRM may be used with any fracture toughness test method, but is optimized for beam bending test configurations.

The certified fracture toughness is $4.57 \text{ M Pa} \cdot \text{m}^{1/2} \pm 0.23 \text{ M Pa} \cdot \text{m}^{1/2}$

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PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.